

## REMARKS

In response to the Final Office Action dated July 11, 2007, Applicants respectfully request reconsideration based on the following remarks, wherein no new matter is added.

Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-7 and 14-18 are pending in the present Application. Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

### Claim Rejections Under 35 U.S.C. §103

Claims 1-7 and 14-18 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Applicant's Admitted Prior Art, Figures 1-4 (hereinafter "AAPA") in view of Kubo et al., U.S. Patent No. 6,452,654 B2 (hereinafter "Kubo"). Applicants respectfully traverse the rejections.

Claims 1 and 14 recite, *inter alia*,

"...a pixel electrode including  
a transparent electrode, and  
a reflective electrode disposed on the transparent electrode, having an area less than the transparent electrode and defining a first region of the transparent electrode, a portion of the transparent electrode being exposed without being covered by the reflective electrode defining a second region, the second region of the transparent electrode including a first boundary and a second boundary,  
wherein the first boundary is a boundary between the first and second regions and the second boundary is an exposed edge of the transparent electrode; and  
an orientation film coated on an upper surface of the pixel electrode and having an *orientation groove rubbed in a first direction from the first boundary toward the second boundary*, the orientation groove preventing impurity from being stacked at the first boundary of the transparent electrode...."

As conceded in the Office action regarding Claims 1 and 14 at Page 5, APA does not show "the second region including a second boundary where the second boundary is an exposed edge of the second region." Accordingly, APA necessarily does not teach or suggest an orientation film having an orientation groove rubbed in a first direction from the first boundary between the first and second regions, toward an exposed edge of the transparent electrode of Claims 1 and 14. To the contrary of the claimed invention, APA the orientation groove 15a is only shown in a direction towards a boundary between the transparent electrode 14a and reflective electrode 14b, *from an exposed region* of the transparent electrode 14b.

Applicants note that the rejection details at Page 5 of the Office action rely on Kubo merely to teach a first boundary between the reflection region 22 and the transmissive region 20, and an exposed edge of the transparent electrode 21. The rejection details cite no feature or element of Kubo relating to an orientation film and orientation groove, especially an orientation groove rubbed in a first direction from the first boundary (i.e., between the reflection region 22 and the transmissive region 20) toward the exposed edge of the transparent electrode 21, as claimed.

Kubo does not teach or suggest anything related to an "orientation groove" disposed on an upper surface of the pixel electrode 1/22/23. In Figs. 2, 7, 8B, 11B, 12B, 25, 31, 33 for example, there is no element "coated on an upper surface of the pixel electrode," let alone anything resembling an "orientation groove" of the claimed invention. Where Kubo describes alignment films 56, there is no teaching or suggestion of an "orientation groove." (See for example, Col. 13, lines 60-62 and Figs. 9, 10.) The only "orientation" Kubo mentions is one changed by controlling the electric field between the counter electrode 10 and the pixel electrode 1. (See, Col. 10, lines 18-23.) Therefore, Kubo like APA, does not teach or suggest an orientation film having an orientation groove rubbed in a first direction from the first boundary between the first and second regions, toward an exposed edge of the transparent electrode of Claims 1 and 14.

Thus, since APA and Kubo, alone or in combination, fail to teach or suggest an orientation film having an orientation groove rubbed in a first direction from the first boundary between the first and second regions, toward an exposed edge of the transparent electrode of Claims 1 and 14, *prime facie* obviousness does not exist regarding at least Claims 1 and 14 with respect to APA and Kubo.

Additionally, Applicants submit that there exists no suggestion or motivation to modify or combine APA and Kubo to teach the claimed invention.

Firstly, APA only teaches *contrary to the claimed invention* regarding an orientation groove. Since APA only teaches the orientation groove 15a in a direction *towards a boundary* between the transparent and reflective electrode, *from an exposed region* of the transparent electrode, there exists no suggestion or motivation in APA, nor to one of ordinary skill in the art to include the orientation groove 15a of APA in a direction towards *an exposed region* of the

transparent electrode 14a from a boundary between the transparent and reflective electrode, let alone an exposed edge of the transparent electrode 14b, of the claimed invention. Therefore, there exists no suggestion or motivation to modify or combine APA to teach the claimed invention.

Secondly, since Kubo is silent regarding an orientation groove, let alone relative to an exposed edge of the transmissive region 20/21 of Kubo, there exists no suggestion or motivation in Kubo, nor to one of ordinary skill in the art to include an orientation groove in the display device of Kubo, especially an orientation groove in a direction towards an exposed edge of the transparent electrode 21 from a boundary between the reflection region 22 and the transmissive region 20. Therefore, there exists no suggestion or motivation to modify or combine Kubo to teach the claimed invention.

Thirdly, in the Office action at Page 6, it is alleged in the rejection details that APA in view of Kubo have the same structure with the instant invention. Applicants respectfully disagree.

For all the reasons discussed above, APA and Kubo, alone or in combination, fail to teach or suggest an orientation film having an orientation groove rubbed in a first direction from the first boundary between the first and second regions, toward an exposed edge of the transparent electrode of Claims 1 and 14. In fact, APA teaches contrary to the claimed invention, and Kubo is completely silent as to anything resembling an “orientation groove” of the claimed invention. Therefore, APA and Kubo *fail to teach or suggest all of the limitations of* Claims 1 and 14, and there exists no suggestion or motivation to modify or combine APA and Kubo to teach the claimed invention.

For purpose of clarification, Applicants respectfully note that the rejection details at Page 6 cite “a first direction *toward the second region* including the first boundary and the second boundary.” However, Claims 1 and 14 recite “a first direction from the first boundary toward the *second boundary*.”

Finally, if the orientation groove 15a of APA were combined with the transmissive region 20/21 and reflection region 22/23 of Kubo, the orientation groove 15a would extend in a direction *towards a boundary* between the transmissive region 20/21 and reflection region 22/23 of Kubo, *from an exposed region* of the transparent electrode 21, and completely contrary to the claimed invention. That is, combining APA and Kubo do not teach the claimed invention, and in

fact, teach contrary to the claimed invention. Therefore, there further exists no suggestion or motivation to modify or combine APA and Kubo to teach the claimed invention.

Since APA and Kubo, alone or combination, *fail to teach or suggest all of the limitations* of Claims 1 and 14, since APA teaches *contrary to the claimed invention*, and since combining APA and Kubo does not teach the claimed invention, but in fact teaches contrary to the claimed invention, for all the reasons discussed above, *prima facie* obviousness does not exist regarding Claims 1 and 14 with respect to APA and Kubo.

Thus, *prime facie* does not exist regarding Claims 1 and 14 with respect to APA and Kubota. Applicants respectfully submit that Claims 1 and 14 are not further rejected or objected and are therefore allowable. Claims 2-7 and 15-18 variously depend from Claims 1 and 14, are not further rejected or objected and are correspondingly allowable as depending upon allowable Claims 1 and 14. Reconsideration, withdrawal of the relevant claim rejections and allowance of Claims 1-7 and 14-18 are respectfully requested.

### **Conclusion**

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued.

If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

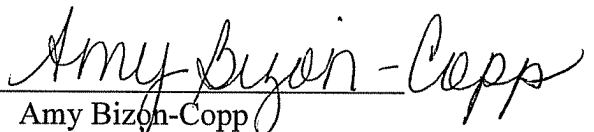
Application No. 10/612,649  
Reply dated: September 11, 2007  
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In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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